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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,975	07/21/2005	Alastair J. Martin	PHUS030017US	1970
38107 7590 03/09/2010 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P. O. Box 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER MCEVOY, THOMAS M				
ART UNIT		PAPER NUMBER		
3731				
MAIL DATE		DELIVERY MODE		
03/09/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/542,975

**Applicant(s)**

MARTIN, ALASTAIR J.

**Examiner**

THOMAS MCEVOY

**Art Unit**

3731

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13, 16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 16, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. In view of the Appeal Brief filed on November 19<sup>th</sup> 2009, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below: (please see the last page).

***Response to Amendment***

2. The after-final amendment filed on November 19<sup>th</sup> 2009 has been entered and is sufficient to overcome the previous 35 U.S.C. 112 2nd rejection of claim 13.

***Election/Restrictions***

3. Newly submitted claim 21 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: based on Applicant's remarks in the Appeal Brief filed November 19<sup>th</sup> 2009, the invention described in claim 21 can now be structurally understood (although not necessarily

enabled) to represent a different species than the structures depicted in the drawings and previously acted upon.

Since applicant has received an action on the merits for the originally presented invention on 12/08/08, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 21 is withdrawn from consideration as being directed to a non-elected species. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites the limitation "segment currents" in line 14. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

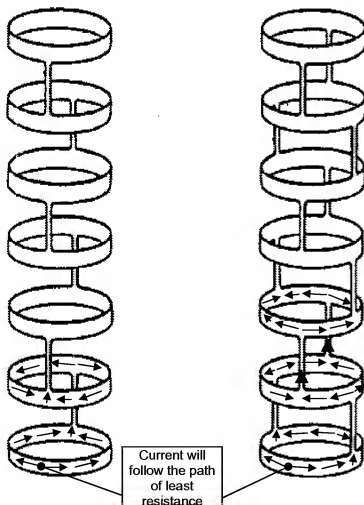
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 12, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lau et al. (US 6,066,168) in view of Pacetti (US 2002/0188345).

Regarding claim 12, Lau et al. disclose a stent for use in intravascular therapy, the stent comprising: a plurality of electrically conductive elements arranged in a generally tubular structure, the conductive elements comprising generally diagonally arranged struts with respect to a central axis of the stent (Figures 1-3), the conductive elements comprising: a plurality of loops 12 disposed about a central axis of the stent; and a plurality of linking members 13 for joining the loops such that the loops and linking members form a generally tubular structure around the central axis of the stent. Lau et al. fail to disclose a plurality of non-conductive connector nodes as claimed. Pacetti discloses non-conductive connector nodes which minimize current loops (paragraph 0038; improvements in MRI imaging have been made at and shortly after the time of Pacetti's invention - see attached Notice of References Cited) flowing within a stent in order to enable better MRI imaging (Abstract, paragraphs 0033, 0035 and 0038). One of ordinary skill in the art would have recognized the benefit of this modification to the Lau et al. stent because it is well-known in the art to use MRI imaging when deploying stents of similar function and structure to those of Lau et al. Therefore, it would have been obvious to one of ordinary skill in the art to have placed the nodes of Pacetti anywhere throughout the stents of Lau et al. in order to minimize current loops flowing

within the stent so that MRI imaging is enhanced. With this modification, the nodes would be disposed among the conductive elements and would direct (the nodes at least participate in directing the current along its normal path and would prevent shorts in their immediate vicinity) a current induced by RF signals in an examination region of a magnetic resonance apparatus to flow in the conductive elements such that adjacent segment currents cancel each other and a net current flowing in the stent is substantially minimized (see current flows [→] below; the currents within each loop would substantially cancel or minimize the currents in adjacent loops as evidenced by Applicant's disclosure):



The above combination would also result in the loops and linking members being connected (intra-connected or indirectly inter-connected) within the non-conductive connector nodes such that the current flowing through adjacent loops substantially cancel each other (as shown above). Regarding claim 16, when the undulations of the Lau et al. stent are offset as in Figure 11, they would form an overall diamond-shaped mesh pattern on the stent (when the stent is expanded) and each loop would have a zig-zag pattern. Regarding claim 19, in the Figure 8 embodiment of the Lau et al. stent each zig-zag loop is connected to each neighboring zig-zag loop only once. Regarding claim 9, Lau et al. disclose that the connectors 13 connect neighboring loops at approximately 90 degree intervals (four connectors, col. 5, line 60) and disclose that in other embodiments the connectors are evenly spaced (Figures 8-10). Therefore, it would have been obvious to one of ordinary skill in the art to have distributed the four connectors evenly which would result in 90 degree intervals as claimed. Furthermore regarding claims 19 and 20, as can be seen in the drawings above, the current would flow in opposite directions in adjacent loops no matter how many connectors are used so long as the connectors are radially offset between adjacent loops as disclosed by Lau et al. (col. 5, lines 42-48).

### ***Response to Arguments***

9. Applicant's arguments filed in the Appeal Brief with respect to the pending claims have been considered but are either moot in view of the new ground(s) of rejection or are not persuasive. Applicant has argued that the stent of Lau et al. would not form a

diamond-shaped mesh. Examiner respectfully disagrees and believes that the offset undulations in Figure 11 would form a diamond-like pattern or mesh when expanded. The remainder of Applicant's arguments is believed to be moot in view of the new grounds of rejection.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **THOMAS MCEVOY** whose telephone number is (571)270-5034. The examiner can normally be reached on M-F, 9:00-6:00.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas McEvoy/  
Examiner, Art Unit 3731

/Anh Tuan T. Nguyen/  
Supervisory Patent Examiner, Art Unit 3731  
03/01/2010